

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions  
(formerly Eaton)

Brand: METALUX

Report Number: P276733

Luminaire Tested: **24CZ2-30HE-RDP-UNV-L83050-W2A1-U-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P276733  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-19)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ2-30HE-RDP-UNV-L83050-W2A1-U-3500K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH RDP LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1953.0 lumens  
Efficiency: N/A  
Efficacy: 99.5 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.3 / 1.41  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

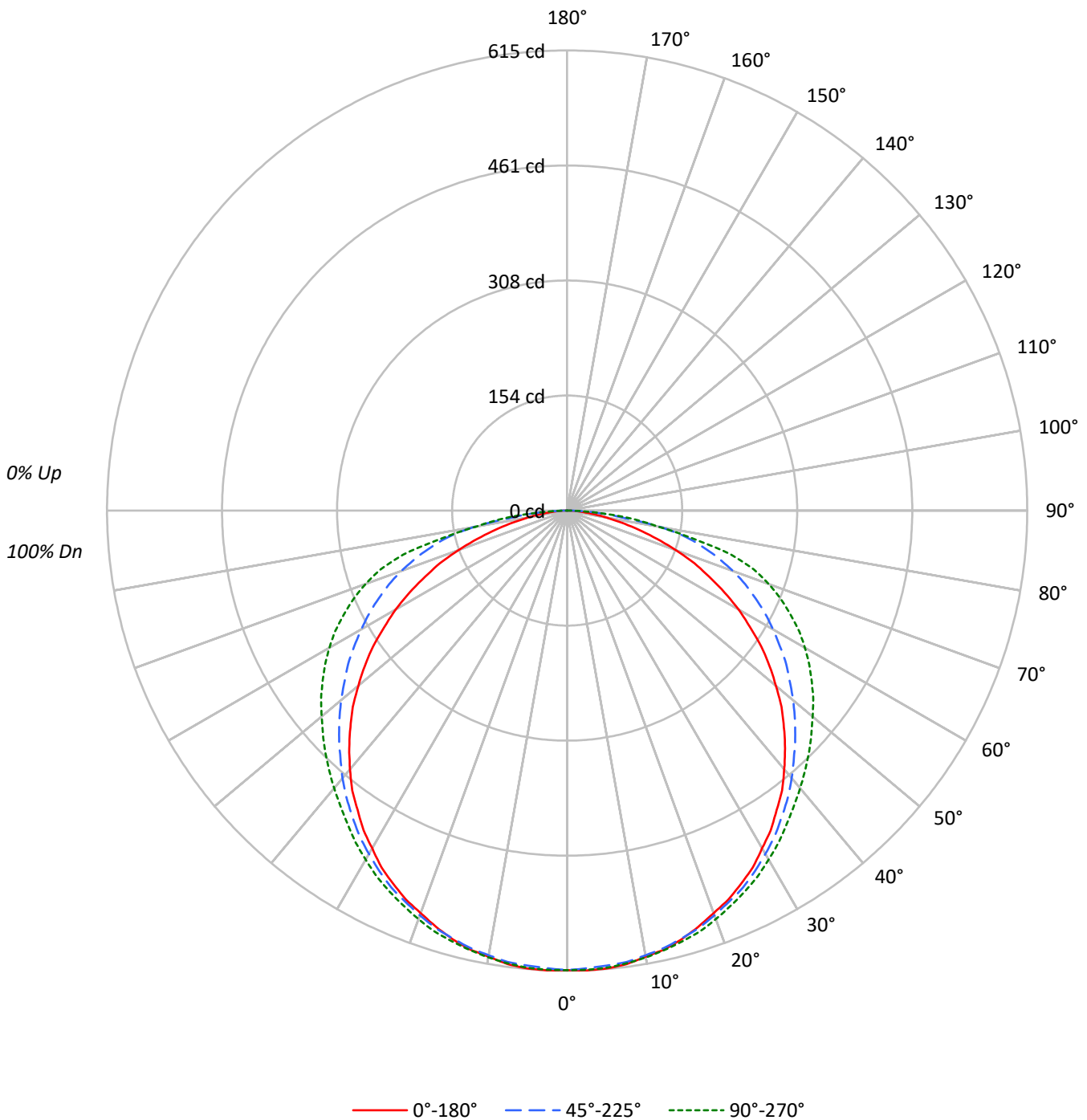
Input Watts (W): 19.623  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P276733

CATALOG NUMBER: 24CZ2-30HE-RDP-UNV-L83050-W2A1-U-3500K

### Luminous Intensity Polar Plot





TEST NUMBER: P276733

CATALOG NUMBER: 24CZ2-30HE-RDP-UNV-L83050-W2A1-U-3500K

**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	108	103	98	94	105	100	96	92	96	93	89	92	89	87	88	86	84	82
2	97	89	81	75	95	87	80	74	83	77	72	80	75	71	77	73	69	67
3	88	77	68	62	86	76	68	61	72	66	60	70	64	59	67	62	58	56
4	81	68	59	52	78	67	58	51	64	57	51	62	55	50	59	54	49	47
5	74	60	51	44	72	59	51	44	57	49	43	55	48	43	53	47	42	40
6	68	54	45	38	66	53	45	38	51	44	38	50	43	37	48	42	37	35
7	63	49	40	34	61	48	40	34	47	39	33	45	38	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	41	34	29	40	34	29	27
9	55	41	33	27	53	40	32	27	39	32	27	38	31	26	37	31	26	24
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	826	826	826
5°	830	824	828
10°	827	825	828
15°	826	824	830
20°	820	824	832
25°	817	825	834
30°	810	823	837
35°	802	821	840
40°	793	820	851
45°	780	820	870
50°	762	825	896
55°	743	839	936
60°	712	855	988
65°	666	885	1049
70°	606	926	1128
75°	514	977	1179
80°	405	983	953
85°	299	747	837



TEST NUMBER: P276733

CATALOG NUMBER: 24CZ2-30HE-RDP-UNV-L83050-W2A1-U-3500K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	58.3	3.0
10°-20°	167.7	8.6
20°-30°	256.4	13.1
30°-40°	313.4	16.0
40°-50°	334.1	17.1
50°-60°	319.4	16.4
60°-70°	270.6	13.9
70°-80°	181.8	9.3
80°-90°	51.3	2.6
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	482.3	24.7
0°-40°	795.8	40.7
0°-60°	1449.3	74.2
0°-90°	1953.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1953.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	614	614	614	614	614	
5°	614	613	610	613	613	58
15°	593	593	592	597	596	167
25°	550	552	556	561	562	254
35°	488	492	500	510	512	306
45°	410	416	431	450	457	316
55°	317	328	358	386	399	282
65°	209	231	278	315	329	208
75°	99	135	188	220	227	106
85°	19	40	48	52	54	24
90°	0	0	0	0	0	



TEST NUMBER: P276733

CATALOG NUMBER: 24CZ2-30HE-RDP-UNV-L83050-W2A1-U-3500K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	614.2	614.2	614.2	614.2	614.2
2.5°	615.1	615.1	612.2	614.2	614.2
5°	614.2	613.2	610.3	613.2	613.2
7.5°	611.3	610.3	608.4	611.3	610.3
10°	605.4	605.4	603.5	606.4	606.4
12.5°	600.6	599.6	598.7	602.5	601.6
15°	592.9	592.9	591.9	596.7	595.8
17.5°	583.2	584.1	585.1	589.0	589.9
20°	572.5	574.4	575.4	581.2	581.2
22.5°	562.8	563.8	565.7	571.5	571.5
25°	550.2	552.2	556.0	560.9	561.9
27.5°	537.6	538.6	543.4	550.2	551.2
30°	521.2	524.1	529.9	537.6	538.6
32.5°	506.6	509.5	516.3	524.1	526.0
35°	488.2	492.1	499.9	509.5	511.5
37.5°	471.8	474.7	484.4	495.0	497.9
40°	451.4	457.2	466.9	479.5	484.4
42.5°	431.1	436.9	448.5	465.0	470.8
45°	409.8	416.5	431.1	449.5	457.2
47.5°	388.5	396.2	412.7	434.0	442.7
50°	364.2	373.9	394.3	418.5	428.2
52.5°	341.0	352.6	374.9	402.0	414.6
55°	316.8	328.4	357.5	385.5	399.1
57.5°	289.6	305.1	337.1	369.1	383.6
60°	264.5	279.0	317.7	352.6	367.1
62.5°	237.3	256.7	298.4	335.2	349.7
65°	209.2	230.6	278.0	314.8	329.4
67.5°	184.1	207.3	257.7	294.5	309.0
70°	154.0	183.1	235.4	272.2	286.7
72.5°	125.9	157.9	212.1	248.0	261.6
75°	98.8	134.7	187.9	219.9	226.7
77.5°	73.6	111.4	162.7	176.3	171.5
80°	52.3	89.1	126.9	120.1	123.0
82.5°	33.9	67.8	78.5	89.1	92.0
85°	19.4	39.7	48.4	52.3	54.2
87.5°	8.7	14.5	19.4	19.4	18.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)